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Laminar Heating Correlation for Tunnel 9 CoTE Tests

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Heating Correlations



•
$$St = \frac{q_w}{\rho_\infty U_\infty (H_{0,\infty} - c_{p,\infty} T_w)}; T_w = 300 K$$

•
$$ReL = \frac{\rho_{\infty}U_{\infty}L}{\mu_{\infty}}$$
; $L = 61.271$ inches

• Laminar heating correlation $St * \sqrt{ReL}$





